

RECEIVED
CENTRAL FAX CENTER

NOV 13 2006

PATENT
18088 (AT 20958-1534)**REMARKS**

Claims 1-26 and 28 are pending in this application. Claims 1-26 and 28 are rejected. No new matter has been added. It is respectfully submitted that the pending claims define allowable subject matter.

As an initial matter, Applicant acknowledges with appreciation the allowance of claim 19.

Claims 1, 2, 4, 5, 7, 15-18 and 20-22 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Yonezawa et al. (U.S. Patent Application Publication 2003/0211827), hereafter Yonezawa, in view of Menard (U.S. Patent Application Publication 2004/0203563) and further in view of Yarkosky (U.S. Patent 6,895,218). Applicant respectfully traverses this rejection.

Yonezawa describes a repeater system for radio communications that overcomes blind-zones using a base station-directed antenna 21, a base station-directed unit 33, a mobile station-directed unit 34 and a mobile station-directed antenna 28 (see, e.g., Yonezawa, paragraph 0031). In operation, a base station-directed unit 51 and a mobile station-directed unit 53 are linked via a radio transmission medium over which a frequency-converted radio repeating signal 55 is transmitted (see, e.g., Yonezawa, paragraph 0035).

Menard describes an emergency communication and monitoring system that provides communication to and from a mobile unit. The communication signal may include a priority code indicating that the message is an emergency message. Further, various devices may be designated as having a trusted status (see, e.g., Menard, paragraphs 0023-0025).

Yarkosky describes a method for in-building distribution of wireless signals using propagation relays wherein directional antennas may be used to communicate signals in long, narrow structures, such as a tunnel (see, e.g., Yarkosky, column 6, lines 23-28).

Claim 1, as amended recites a communication system comprising "the second communication module disposed on a building and adapted to receive the second type of communication signal from the first communication module, and transmit the second type of

PATENT
18088 (AT 20958-1534)

communication signal inside the building to a third communication module at a power level based on a signal-to-interference level." Support for this amendment may be found, for example, in the specification as filed at paragraph 0036.

The combination of Yonezawa and Menard with Yarkosky fails to describe or suggest a system as recited in claim 1. Although the combination discloses communicating a signal having a priority code present to indicate that the message is an important message, such as, for transmission by police, fire and related services, the combination does not describe or suggest transmitting signals at a power level based on a signal-to-interference level to provide, for example, reliable communications. In particular, communications in the Menard system are distinguished based on the priority code indicating an urgency or importance level. Signals then may be routed based on priority. However, the power level of the transmitted signals is not adjusted based on the priority code. Moreover, adjusting the power level based on a signal-to-interference level is simply not described or suggested. Accordingly, Applicant submits that the combination of Yonezawa and Menard with Yarkosky does not describe or suggest a system as recited in independent claim 1.

Claims 2, 4, 5, 7, 15-18 and 20-22 depend from independent claim 1. When the recitations of claims 2, 4, 5, 7, 15-18 and 20-22 are considered in combination with the recitations of claim 1, Applicant submits that dependent claims 2, 4, 5, 7, 15-18 and 20-22 are likewise patentable over the combination of Yonezawa and Menard with Yarkosky for at least the same reasons set forth above.

Claims 3 and 12 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Yonezawa et al. in view of Menard and Yarkosky and further in view of Iwata et al. (U.S. Patent Application Publication 2004/0137842 A1). Applicant respectfully traverses this rejection.

Claims 3 and 12 depend from independent claim 1 and are allowable based at least on the dependency of these claims from claim 1. Further, even from a cursory reading of the Iwata et al. reference, this reference fails to make up for the deficiencies of the Yonezawa et al, Menard and Yarkosky references as discussed in more detail above.

PATENT
18088 (AT 20958-1534)

Claim 6 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Yonezawa et al. in view of Menard and Yarkosky and further in view of Takatori et al. (U.S. Patent 6,421,027 B1). Applicant respectfully traverses this rejection.

Claim 6 depends from independent claim 1 and is allowable based at least on the dependency of this claim from claim 1. Further, even from a cursory reading of the Takatori et al. reference, this reference fails to make up for the deficiencies of the Yonezawa et al, Menard and Yarkosky references as discussed in more detail above.

Claims 8 and 9 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Yonezawa et al. in view of Menard and Yarkosky and further in view of Judd et al. (U.S. Patent Application Publication 2002/0177401). Applicant respectfully traverses this rejection.

Claims 8 and 9 depend from independent claim 1 and are allowable based at least on the dependency of these claims from claim 1. Further, even from a cursory reading of the Judd et al. reference, this reference fails to make up for the deficiencies of the Yonezawa et al, Menard and Yarkosky references as discussed in more detail above.

Claims 10, 11 and 14 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Yonezawa et al. in view of Menard and Yarkosky and further in view of Masoian (U.S. Patent Application Publication 2001/0031623). Applicant respectfully traverses this rejection.

Claims 10, 11 and 14 depend from independent claim 1 and are allowable based at least on the dependency of these claims from claim 1. Further, even from a cursory reading of the Masoian reference, this reference fails to make up for the deficiencies of the Yonezawa et al, Menard and Yarkosky references as discussed in more detail above.

Claim 13 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Yonezawa et al. in view of Menard and Yarkosky and further in view of Iwata et al. and Haemmig et al. (U.S. Patent 3,876,980). Applicant respectfully traverses this rejection.

Claim 13 depends from independent claim 1 and is allowable based at least on the dependency of this claim from claim 1. Further, even from a cursory reading of the Iwata et al. and Haemmig et al. references, these references fail to make up for the deficiencies of the Yonezawa et al, Menard and Yarkosky references as discussed in more detail above.

PATENT
18088 (AT 20958-1534)

Claims 23-26 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over O'Neill (U.S. Patent Application Publication 2004/0176027) in view of Yarkosky. Applicant respectfully traverses this rejection.

Claim 23, as amended, recites an apparatus comprising a communication module mountable to the side of a building and the communication module is configured to "transmit the radio signal such that the radio waves communicating the radio signal propagate at least one of substantially upward and substantially downward along an outside surface of the building." Support for this amendment may be found, for example, in the specification as filed at paragraph 0029 and as shown in Figure 5.

The combination of O'Neill and Yarkosky fails to describe or suggest an apparatus as recited in claim 23. O'Neill describes a repeater system for use in communications, such as, cellular system communications, that may be located in a high-rise building in the interior of an external room in the building, preferably near a window (see, e.g., O'Neill abstract and Figure 2). Yarkosky as shown in Figure 5 describes a propagation relay (including an antenna) attached to a building that provides communication between a base station and a plurality of mobile station interface ports within the building or other structure (column 6, lines 6-29). However, in order to communicate signals between the units in the building and a base station outside the building, the radio signals cannot be transmitted such that the radio signals propagate at least one of substantially upward and substantially downward along an outside surface of the building. Such a vertically directed communication propagation is simply not described or suggested. The signals in the cited art are communicated out of and into structures, but not upward and downward along the outside surface of the building. Such a vertical transmission (upward and downward) would not provide proper communication of the signal to reach a base station located outside the building. As shown in Figure 5 of Yarkosky, the radio signals must be communicated outward from the building (i.e., perpendicular to the building) in order to reach a base station. Communication of the radio signals substantially upward and downward along the outside surface of the building is simply not shown or suggested. The signals shown in Figure 5 propagate inward to and outward from the outside surface of the building and not upward and downward as recited in claim 23. Accordingly, Applicant submits that the combination of O'Neill and Yarkosky does not describe or suggest an apparatus as recited in independent claim 23.

PATENT
18088 (AT 20958-1534)

Claim 24 depends from independent claim 23. When the recitations of claim 24 are considered in combination with the recitations of claim 23, Applicant submits that dependent claim 24 is likewise patentable over the combination of O'Neill and Yarkosky for at least the same reasons set forth above.

Claim 25, as amended, recites a method comprising "receiving a radio signal at a communication module, wherein the communication module is mounted to the side of a building, wherein the radio signal originated from an elevation different than the communication module and the signal is encoded with an indication of the elevation from which the signal was transmitted." Support for this amendment may be found, for example, in the specification as filed at paragraph 0034.

The combination of O'Neill and Yarkosky fails to describe or suggest a method as recited in claim 25. There is simply no description or suggestion in O'Neill and Yarkosky of providing any information as part of the transmitted signal that indicates an elevation from which the signal was transmitted. Using the combination of O'Neill and Yarkosky, when a signal is decoded, known signaling information, such as channel and frequency information may be determined, as well as the base message. However, there is simply no description or suggestion of such a system also receiving an elevation indication in the encoded message. Nothing in the cited references describes such a signal. Accordingly, Applicant submits that the combination of O'Neill and Yarkosky does not describe or suggest a method as recited in independent claim 25.

Claim 26 depends from independent claim 25. When the recitations of claim 26 are considered in combination with the recitations of claim 25, Applicant submits that dependent claim 26 is likewise patentable over the combination of O'Neill and Yarkosky for at least the same reasons set forth above.

Claim 28 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over O'Neill and Yarkosky in view of Petite (U.S. Patent Application Publication 2005/0201397). Applicant respectfully traverses this rejection.

Claim 28 depends from independent claim 25 and is allowable based at least on the dependency of this claim from claim 25. Further, even from a cursory reading of the Petite reference, this reference fails to make up for the deficiencies of the O'Neill and Yarkosky

PATENT
18088 (AT 20958-1534)

references as discussed in more detail above. There is simply no description or suggestion in the cited art of providing in the encoded signal an indication of a floor from which the signal was transmitted.

In view of the foregoing amendments and remarks, it is respectfully submitted that the prior art fails to teach or suggest the claimed invention and all of the pending claims in this application are believed to be in condition for allowance. Reconsideration and favorable action is respectfully solicited. Should anything remain in order to place the present application in condition for allowance, the Examiner is kindly invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,



Evan Reno Sotiriou, Reg. No. 46,247
THE SMALL PATENT LAW GROUP LLP
Suite 1611
611 Olive Street
St. Louis, MO 63101
314-584-4080